FY 2000 Subsistence Fisheries Project Narrative Project #32

Project Title: Sockeye Salmon Escapement in the Buskin River

Investigator Organizations: ADF&G Sport Fisheries Division with local hires

Geographic Area: Kodiak Island/Gulf of Alaska Information Type: Stock Status and Trends

Issue Addressed: The Buskin River Subsistence Sockeye Fishery has the largest number of participants of any subsistence fishery in the Westward Region. The fishery has averaged about 400 fishermen annually over the past 5 years, and subsistence sockeye harvests have averaged 4,400 fish. The minimum escapement goal is 8,000 sockeye and escapements have averaged 11,600. Monitoring the sockeye return in the Buskin River is a very important project because of the high subsistence use it receives and because minimum spawning escapements are barely achieved each year. Information gathered form this project will support the evaluation of the current escapement goal. The fishery occurs in the Federal Alaska Maritime Refuge and the river flows through the U.S. Coast Guard Base uplands. The subsistence fishery is the major harvester of Buskin River's Sockeye.

Study Objectives:

- 1. Census the sockeye salmon escapement into Buskin Lake from June 1 to August 15.
- 2. Estimate the age, sex, and length composition of the sockeye salmon escapement into Buskin Lake from June to July 15.
- 3. Estimate the age, sex, and length composition of the subsistence harvest of sockeye salmon in marine waters adjacent to the Buskin River mouth from June 1 to July 15.
- 4. Investigate relocating/modifying the weir so that it can be installed lower in the river to facilitate a complete sockeye count can be accomplished (including Lake Louise and Lake Genevieve tributaries).

Project Description: Three ADFG technicians will install the weir at Buskin Lake outlet during the last week of May, so that the weir will be fully operational by June 1. Salmon will be enumerated daily, through August 15, when most of the return is complete. The escapement will be sampled for age, sex, and length data at the weir trap. Locally hired fisheries technicians will collect biological samples from the subsistence fishery harvest. ADF&G staff will investigate possible weir sites in the lower river as well as weir design modifications that will enable the weir to remain operational during high water events.

Consultations Completed/Potential for Capacity Building: The Sport Fish Division currently operates a weir in the Buskin River to enumerate coho from August 15 through October 1. The Division will give preference to local residents when job openings occur.

Deliverables/Products: Information from this project will be used to manage current fisheries so that minimum escapement objectives are achieved. Biological data (age, sex, and size composition) will be combined with statistics from past years. When data from a sufficient number of years is collected, brood tables will be constructed and a review of the escapement goal will be completed. The escapement goal review will be presented in Fisheries Data Series Report. Data collected annually will be presented in two department reports: the Kodiak Management Area Salmon Escapement Cumulative Counts for Fish Weirs, Regional Information Report and Area Management Report for the Recreational Fisheries of the Kodiak and Alaska Peninsula/Aleutian Islands Regulatory Area.

Costs: FY 2001 costs include purchase and installation of a new weir.

Annual Budget Summary	ADF&G	Local Hires	Total
FY 2000	\$ 2.3 K	\$ 16.2 K	\$18.5 K
FY 2001	\$ 53.7 K	\$ 35.8 K	\$89.5 K
FY 2002	\$ 4.2 K	\$ 35.8 K	\$40.0 K
Total	\$ 60.2 K	\$ 87.8 K	\$148.0 K